

CLAIMS

1. A process for the preparation of a phosphorus pentoxide (hexagonal variety) powder with improved flowability, characterized in that said  
5 phosphorus pentoxide powder is subjected to mechanical stirring by the dry route at ambient temperature under a dry gas atmosphere for a period of time ranging from 5 minutes to 30 minutes.
2. The process as claimed in claim 1,  
10 characterized in that the mechanical stirring time is between 10 and 20 minutes.
- ~~3. The process as claimed in either of~~  
claims 1 and 2, characterized in that the stirring rate  
of the device used for carrying out the process ranges  
15 from 100 rev/min to 350 rev/min.
4. The process as claimed in claim 3,  
characterized in that the stirring rate is between 150 rev/min and 300 rev/min.
5. The process as claimed in any one of  
20 claims 1 to 4, characterized in that it is carried out at a temperature ranging from 15 to 30°C.
6. A phosphorus pentoxide (hexagonal variety) powder obtained as claimed in one of claims 1 to 5, exhibiting a Hausner ratio  $H_r$ , defined as being the  
25 ratio of the tamped apparent density  $d_t$  to the aerated apparent density  $d_a$ , of equal to or less than 1.25.